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“Courage”: CBT Psychological Intervention in Prostate Cancer alongside with PoetryLuísa Soares ^{1*}, João Abreu ¹.¹ Universidade da Madeira, Portugal.***Corresponding Author: Luísa Soares**, Universidade da Madeira, Portugal.**Citation:** Luísa Soares, João Abreu (2025), “Courage”: CBT Psychological Intervention in Prostate Cancer alongside with Poetry; J. Clinical Cancer and Oncology, 2(3): DOI: SH-CCO-RA- 0008.**Copyright: © 2025 Luísa Soares.** This open-access article is distributed under the terms of The Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.**Review Article**

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ABSTRACT

This intervention plan seeks to raise questions rather than answer them. It focuses on sharing knowledge and information with male participants in the hope that they will circulate the information to their social network. Rectal examination, prostate cancer diagnosis, psychological challenges, erectile dysfunction and even the fear of death are topics that these men rarely discuss in their daily lives. When spoken about openly throughout a proposed 6-session intervention program, certain stigmas can be demystified, understood, shared and deconstructed. This demystification is the essential point of this proposal, as it can increase early diagnoses and the search for psychological support, potentially saving lives.

KEYWORDS:

prostate cancer, CBT, psychological intervention, program, poetry

CLINICAL FRAMEWORK OF PROSTATE CANCER

Cancer is the second leading cause of death worldwide, killing an estimated 10,507,675 people in 2022 (Cancer Today, 2024). This pathology is characterized by diseases that develop in any organ or tissue of the human body. It develops due to the uncontrolled multiplication of tumor cells and can spread to other organs or areas of the body through a process known as metastasis (World Health Organization, 2019).

Prostate cancer occurs when there is uncontrolled growth of cells in the prostate, an exclusively male gland located below the bladder and responsible for producing seminal fluid (American Cancer Society, 2019). If cancer spreads outside the prostate, cancer cells may be found in the lymph nodes surrounding the prostate gland. If these cells reach the lymph nodes, there is a very high risk of cancer spreading throughout the Lymphatic System to other nodes, bones or other organs, increasing the difficulty of treatment (Cancer Research UK, 2020).

Most patients with early-stage prostate cancer do not experience any symptoms, so when prostate cancer begins to cause symptoms, it is possibly at a more advanced stage, making the healing process more challenging. Although it is often silent, there are some early warning signs such as blood in the urine, difficulty urinating, pelvic pain, frequent urge to urinate and weak urine flow (Prostate Cancer – Early-Stage: Symptoms, Diagnosis & Treatment - Urology Care Foundation, n.d.). Given the lack of visible symptoms in the early stages of prostate cancer, screening tests play an important role in early diagnosis and, consequently, with higher survival rates (Carvalho & Soares, 2025).

Screening tests can be performed through a blood test or a rectal examination. The blood test measures prostate-specific antigen (PSA) levels, a protein produced by prostate gland cells in both blood and semen. The likelihood of having prostate cancer increases as PSA levels

also increase since this protein is produced by both normal cells and cancer cells, so the presence of cancer cells can explain the increased concentration of PSA in the blood. In the case of a rectal examination, it is performed by inserting a lubricated, gloved finger into the patient's rectum to identify areas of the prostate gland that may be more prominent, hard or rough (Cancer, n.d.; Communication of the Commission's European Cancer Plan to the European Parliament and the Council (n.d.).

If screening tests show any abnormalities or warning signs, patients are referred for biopsy or imaging tests to make a complete diagnosis (American Cancer Society, 2023). Subsequently, patients are referred for the treatment that best suits their needs to cure or control the disease. If the cancer has spread throughout the body, the aim is no longer to cure it but to extend the patient's life expectancy and delay the onset of symptoms (NHS, 2021; Silva & Soares, 2025). The most common approaches to treating prostate cancer are watchful waiting, radical prostatectomy, radiotherapy, brachytherapy, and chemotherapy (NHS, 2021).

Prostate cancer treatment is often associated with side effects that can impact patients' quality of life. Erectile dysfunction, loss of fertility, urinary incontinence and extreme fatigue are some common side effects of various treatments. Discomfort in the anal region, diarrhea, and pain when urinating are some possible side effects associated with radiotherapy. Similarly, nausea, hair loss, loss of appetite and weakened immune system are adverse effects associated with chemotherapy (Prostate Cancer Foundation, 2017; NHS, 2021)

THE STIGMA ASSOCIATED WITH SCREENING TESTS

There are some obstacles to carrying out screening tests due to beliefs and stigmas present in the male sex, which result in less demand for health services (Galdas, 2005). These stigmas and beliefs are very present in prostate cancer patients for two main reasons: physical discomfort and mental discomfort adjacent to screening procedures, especially during the rectal examination (Vapiwala et al., 2021). Although the rectal examination is a critical screening test in aiding early diagnosis, this population must overcome the fear of "losing their masculinity" and accept the examination so there is greater adherence (James et al., 2017; Figueira & Soares, 2025). In response to these challenges, "Europe's Beating Cancer Plan" aims to extend screening beyond breast, colorectal and cervical cancers to include other types of cancer, such as prostate cancer (Silva & Soares, 2025; Santos & Soares, 2024; James et al., 2017).

RISK FACTORS

Anyone born with a prostate is at risk of developing prostate cancer. However, some factors increase the risk of this development, such as advanced age, family history and ethnicity (Prostate Cancer Foundation, 2017). The incidence of prostate cancer increases significantly after the age of 50, with approximately 60% of cases diagnosed in men over the age of 65. Additionally, having a father or brother diagnosed with prostate cancer increases the risk of developing the disease in men. Ethnicity is also a risk factor, as prostate cancer occurs more frequently in African American men and Caribbean men of African descent compared to men of other ethnic origins. It is important to

note that the reasons for these racial and ethnic differences remain unclear (Prostate Cancer Foundation, 2017; American Cancer Society, 2020).

In addition to these risk factors, inherited genetic alterations, more specifically inherited variants of the BRCA1 or BRCA2 gene, are associated with an increased risk of developing several types of cancer, including prostate cancer. Obesity, having had a vasectomy, smoking, contracting sexually transmitted infections, and diets rich in dairy products are risk factors that have been investigated but currently have inconclusive results (American Cancer Society, 2020).

In contrast, exposure to air pollution has positive associations with the development of prostate cancer, reinforcing the evidence that supports the classification of outdoor air pollution as a carcinogenic agent for humans, as established by the International Agency for Research on Cancer (IARC, Younogo et al., 2022). Prostate cancer may also partially correlate with environmental factors such as air temperature, which influence persistent organic pollutants' deposition, absorption and degradation. Some of these pollutants are endocrine disruptors, affecting the production and transport of hormones, including androgen hormones such as testosterone. Dysregulation of testosterone and other hormones, such as cortisol and estrogen, influences the inflammatory response and cell growth balance in the prostate gland, thus increasing the risk of developing prostate cancer (St-Hilaire et al., 2010).

PROSTATE CANCER STATISTICAL DATA: INCIDENCE AND MORTALITY

Prostate cancer is the fourth most common cancer

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globally and the second most prevalent among men, being the fifth responsible for most deaths (Cancer Today, 2024). In 2022, there were 1,467,854 new cases and 397,430 deaths worldwide (Cancer Today, 2024). In Portugal, prostate cancer is the most common among men, with 7,529 new cases and 2,083 deaths in 2022, ranking as the third type of cancer with the most deaths in the male population (Cancer Today, 2024). At a regional level, in Madeira, Portugal, in southern Europe, it is estimated that around 150 new cases will emerge annually, with 37 deaths attributed to prostate cancer in 2022 (RTP Madeira, 2024; Regional Statistics Directorate of Madeira, 2022).

THE BABY BOOMER GENERATION AND PROSTATE CANCER

Baby Boomers, born between 1946 and 1964, and Pre-Boomers, born between 1928 and 1945 (Luttrell et al 2024) are the groups most likely to develop prostate cancer (Serviço de Saúde Da RAM, EPERAM - RON - Registro Oncológico Nacional, 2018; Soares & Castro, 2024). The Baby Boomer generation values the quality of life and demonstrates greater demand for health services than the Pre-Boomer generation. These differences can be explained, in part, by the higher level of educational qualifications and higher income generally observed in the Baby Boomer generation (Luttrell et al., 2024; Soares & Castro, 2024).

THE PSYCHOLOGICAL IMPACT OF PROSTATE CANCER

Between 30% and 50% of prostate cancer patients report psychological and social difficulties, regardless of the stage of the disease, its progression or the type of

treatment received. Among the most frequent psychological problems are anxiety related to the disease and its treatment, depressive symptoms, feelings of guilt and remorse after diagnosis, fear of cancer recurrence and the proximity of death (De Sousa et al., 2019). Additionally, there is a very positive correlation between erectile dysfunction, a side effect of prostate cancer treatment, and lower levels of self-esteem (Hilger et al., 2019; Özkent et al., 2020).

The various stages of diagnosis and the chosen approach to treatment influence the physical, emotional, social and even sexual wellbeing of patients (Appleton et al., 2014). So, the quality of life of people diagnosed with prostate cancer is compromised in the short and long term, and this must be taken into account as an attempt is made to achieve the best possible care for these patients (Dos Santos Silva et al., 2024; Singh et al., 2010). These psychological challenges point to the need for a planned psychological intervention, and as such, the intervention plan entitled "Courage" is proposed to change behaviors (Soares, 2023; Soares et al., 2024; Zuniga et al., 2019) reduce prejudice and stigma regarding screening and acceptance of a prostate cancer diagnosis.

THE PSYCHOLOGICAL INTERVENTION PLAN

The intervention plan consists of six weekly sessions, five group sessions lasting between 60 and 120 minutes and one individual session lasting between 45 and 60 minutes. Additionally, there will be an individual session 0, applied before the start of the plan, lasting 60 minutes. A psychologist should implement this plan in the context of primary health care.

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The group must be composed of 10 male participants, between 60 and 78 years old (belonging to the Baby Boomer generation) and who have been diagnosed with prostate cancer. They must be able to read and write in addition to their name and not have a diagnosis of severe psychopathologies that prevent participation and understanding of activities based on cognitive behavioral therapy (such as depression or psychosis).

The primary objective is to improve participants' quality of life and reduce the associated stigma, based on the theoretical model of cognitive behavioral therapy (CBT). CBT has been the preferred approach in oncology since group intervention, especially that which includes cognitive behavioral strategies, is more effective with cancer patients (Torres et al., 2014).

Session 0 – Screening and selection of participants

The objective of session 0 is to identify and select 10 participants for the psychological intervention program using the inclusion criteria to guarantee the group's homogeneity and the adequacy of the Cognitive Behavioral Therapy model. This session also seeks to begin the therapeutic relationship with the participant, which will be essential for the effectiveness of the psychological intervention. Session 0 begins with an initial presentation by the psychologist and the participant, followed by a screening interview where the necessary clinical information will be collected. Subsequently, the psychologist will apply the WHO-5 Scale designed to assess the participant's wellbeing over the last 2 weeks. This Likert scale has only 5 items, with responses ranging from 0 (Never) to 5 (All the time; Bakhtiyar Aliyev et al., 2024). It is important to note that although there is a translated

version of the WHO-5 scale, it is not validated for the Portuguese population. We strongly recommend that this validation be carried out, or the WHO-5 scale cannot be applied.

SESSION 1: EACH DIAGNOSIS IS A STORY

Session 1 aims to create a safe space for participants to share their personal experiences and demystify the topics of digital rectal examination and prostate cancer diagnosis. It begins with the psychologist introducing the group and a guest, a former prostate cancer patient. Afterward, the psychologist must consolidate some rules that must be followed in the sessions, focusing mainly on mutual respect between participants and the confidentiality. This introductory phase concludes with the participants introducing themselves to each other.

Next, a brief psychoeducation session about the digital rectal exam and the diagnosis of prostate cancer, addressing the stigma surrounding the digital rectal exam, why it causes discomfort and what can be done in order to mitigate it. Psychoeducation will also serve to inform about the psychological impact this can have on participants and those people around them and how these challenges are common to many men diagnosed with prostate cancer. It will follow an invitation to share personal experiences on the topics previously discussed: digital rectal examination and the first contact with the diagnosis of prostate cancer. An important rule is that no one feels forced to start talking about what makes them uncomfortable; the guest is called to intervene and is in charge of sharing first, "breaking the ice," and potentially making participants feel encouraged to share their own experiences.

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Afterward, the psychologist leads a discussion about the shared experiences to include the content learned in the initial psychoeducation in their reflections. It is an incentive if the information discussed in the session is passed on to other men outside the group who belong to the participant's social circle (Santos Silva et al., 2024). This transfer of information will be relevant throughout the intervention plan, which is why there is an excellent emphasis on psych educating participants so that the skills acquired are helpful for them and their community—social surroundings.

Before closing the session, each participant will receive a logbook that they should use throughout the intervention to record thoughts, emotions, concerns or desires related to their diagnosis, wellbeing, and the sessions they participate. Furthermore, participants will give feedback at the end of each session, mentioning aspects they liked most, how they felt, and what could be improved, with anonymity. Logbooks are important on two fronts: they are helpful for the participants and the psychologist. Logbooks are important for participants because they serve as a written record of their progress throughout the sessions. For psychologists they are helpful because they keep participants engaged with the intervention between sessions, in addition to having access to their view. Personal real-time monitoring of each participant provides good insight into the plan's gains and weaknesses, thus facilitating future improvements.

SESSION 2: RELAXATION AND STRESS MANAGEMENT TECHNIQUES

Session 2 focuses on teaching and practicing relaxation and stress management techniques to help participants

cope with anxiety and stress associated with prostate cancer diagnosis and treatment. Begins with a review of the previous session and a presentation of the objective of the current session. Relaxation and stress management techniques will be worked out as early as possible so that participants can practice these skills, calm down, and self-regulate their emotions when needed.

Before applying relaxation and stress management techniques, there will be psychoeducation about stress, which consists of explaining its impact on health and wellbeing, especially in people who are in an oncological context (Conceição & Bueno 2020; Soares & Dantas, 2024). The first relaxation technique to be applied is the Diaphragmatic Breathing Exercise. This technique is used to control anxiety and its symptoms. The exercise begins with participants paying attention to their diaphragm between the abdomen and chest. At the same time, they inhale deeply through the nose and then exhale slowly, always remembering that the diaphragm should expand during inspiration and decrease during expiration (Conceição & Bueno 2020).

The second technique to be applied is Jacobson's Progressive Relaxation Exercise, which aims to reduce the physical impact of stress, reduce anxiety symptoms and lower blood pressure (Conceição & Bueno, 2020):

1. Contract the forehead muscles for 5 seconds; relax for 10 seconds.
2. Smile and remain in the same position for 5 seconds; relax for 10 seconds.
3. Contract the eye muscles for 5 seconds; relax for 10 seconds.

4. Pull the head back for 5 seconds; relax for 10 seconds.
5. Close the fists, squeeze for 5 seconds; relax for 10 seconds.
6. Contract the biceps for 5 seconds; relax for 10 seconds.
7. Contract the triceps for 5 seconds; relax for 10 seconds.
8. Contract the shoulders for 5 seconds; relax for 10 seconds.
9. Tense the back for 5 seconds, relax for 10 seconds.

After Jacobson's progressive relaxation exercise, the last relaxation technique of this session is the 1-minute meditation. A brief explanation is given about the 1-minute meditation and how it can work as a quick tool to refocus the mind and calm the nervous system (Conceição & Bueno, 2020; Lucas & Soares, 2014; Lucas & Soares, 2013; Oliveira & Soares, 2011). The psychologist should then guide the participants as follows:

1. Sit upright in a straight-backed chair. Move the back slightly away from the back of the chair so that the spine can support itself. Feet can rest on the floor. Close your eyes or look down.
2. Concentrate on breathing as the air flows into the body. Perceive the different sensations generated by each inhalation and exhalation. Observe the breathing without expecting anything special to happen. There is no need to alter the natural rhythm.
3. After a few moments, the mind may start to wander. When you realize this, gently bring the attention back to breathing. The act of noticing that the mind has wandered and bringing it back without criticizing yourself is central to meditation.
4. The mind may become as still as a lake. Having a feeling of absolute peace can also be momentary. If you feel bored or irritated, it is important to realize that this emotion is

also momentary. Whatever happens, allowing yourself to be the way you are is important without judgment.

5. After one minute, open your eyes slowly (Conceição & Bueno, 2020).

At the end of each technique, the psychologist should ask the participants how they felt, what was most challenging, what they found most useful and whether they understood the usefulness of these techniques and how to apply them. After applying all the relaxation and stress management techniques, there should be a general discussion about them, reinforcing that the more often they practice, the more effective they become.

SESSION 3 – EMOTIONAL SELF-REGULATION AND SELF-ESTEEM

The objective of session 3 is to strengthen participants' emotional self-regulation and self-esteem. Emotional regulation has clinical relevance in patients with potentially fatal diseases, such as prostate cancer, as it can help promote inner strength and energy, alleviating symptoms of psychological distress and anxiety and improving their quality of life (Seiler & Jenewein, 2019; Soares & Silva, 2023). Therefore, it is appropriate to work on this topic so that they are better able to face the psychological challenges presented by the diagnosis and their adaptation to the treatment of prostate cancer.

Additionally, erectile dysfunction, which is a side effect of most prostate cancer treatments (Siegel et al., 2001), especially in the case of radical prostatectomies, is positively correlated with lower levels of self-esteem (Hilger et al., 2019; Özkent et al., 2020) and depressive symptoms in men diagnosed with prostate cancer who have undergone treatment (Nelson et al., 2011). Given the

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evidence on the low levels of self-esteem presented by prostate cancer patients who experience erectile dysfunction resulting from treatment, it becomes pertinent to address this issue in the psychological intervention plan to mitigate these possible self-esteem and self-image problems (Figueira & Soares, 2025).

Session 3 begins with psychoeducation on emotional management and self-esteem (Conceição & Bueno, 2020). The focus will be on explaining the concept of emotional management and self-regulation and its importance in the context in which participants find themselves, in addition to informing about the psychological impact that erectile dysfunction can have.

To promote emotional reflection on the topic, a poem will be read (Conceição & Bueno, 2020; Lucas & Soares, 2013) since, as suggested by Tegnér et al. (2009), poetry is capable of improving the emotional resilience of cancer patients, in addition to improving their anxiety levels. The chosen poem is "Invictus" by William Ernest Henley (1888):

"Invictus"

From the night that covers me

Black as the moat from Pole to Pole

I thank whatever God may be

For my unconquerable soul

In the straits of circumstances

I did not bow down or cry out loud.

Under the blows of bad luck

My head bleeds but does not bend

Beyond this place of anger and tears

Only the Horror of the shadow rises,

And yet, the threat of the years

*You find me, and you will find me without fear.
No matter how narrow the gate,
How loaded with punishments the scroll is,
I am the master of my destiny,
I am the captain of my soul
-William Ernest Henley, 1888*

After reading the poem, a discussion will be conducted so that participants can make associations between the contents of the poem "Invictus" and the themes of emotional triggers that might occur. These associations may be possible since William Ernest Henley's poem "Invictus" seems to represent the author's attempt to motivate himself in times when there seems to be no hope for better times and seems to do so by emphasizing that regardless of the circumstances, Human beings are capable of overcoming the worst phases of life by being courageous. Enley writes this poem in the hospital after losing one of his legs due to tuberculous arthritis (Spacey, 2017), demonstrating that even with significant physical and psychological pain, he manages to be brave and face life's misfortunes, something that can inspire participants who may also be experiencing physical and psychological pain.

The List of Merit task will be done as homework to improve the participants' self-esteem. In the week between sessions 3 and 4, participants should take a paper and write down positive things they accomplished during the day that deserve credit. By listing positive situations that occurred over a week, they can better perceive their qualities and reduce self-critical thoughts (Conceição & Bueno 2020).

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SESSION 4: SUSTAINABILITY AND HEALTHY PRACTICES

Session 4 aims to help participants understand and manage potential eco-anxiety situations by encouraging sustainable health and wellbeing practices. The aim is to make the intervention plan more effective by encouraging environmentally friendly activities, for example, providing participants with knowledge about how to care for their ecological environment so that they have more control over their day-to-day actions.

The session begins by mentioning homework and the merit list and listening to the group about their experience of doing the homework. What was most challenging? What did they like most? How do they feel after this week?

Once the discussion about homework is over, the psychologist introduces the topic of sustainability and healthy practices and explains what eco-anxiety is. Although eco-anxiety has the potential to harm our wellbeing, it can also be directed towards something productive since the simple fact of feeling eco-anxiety marks a moral sensitivity in the face of climate change (Kurth & Pihkala, 2022).

Eco-anxiety can be channeled into behavioral changes, which can translate into more sustainable behaviors. The idea of environmental sustainability will be presented, and the participants can adopt possible actions to a more sustainable and healthy lifestyle, namely, eating organic products and practicing physical activity. Physical exercise can slow the development of prostate cancer and mitigate some of the side effects of treatments, consequently improving quality of life (Cabral et al., 2023; Camacho et al., 2023; Zuniga et al., 2019). Food will also be discussed since

excessive meat consumption has been associated with an increased risk of developing urological cancer and negatively impacting the environment (Soares & Castro, 2024).

SESSION 5 - SELF-ASSESSMENT

The goal of session 5 will be to self-evaluate each person's progress throughout the sessions, recognizing progress made, identifying challenges still faced, and strengthening commitment to the practices learned. It will be a one-on-one session so that there can be more personalized monitoring and feedback. The following questions can be explored:

1. What have you achieved mentally, emotionally and behaviorally?
2. What did you expect from the psychotherapeutic process?
3. What are the most difficult challenges you have faced so far?
4. What challenges have you overcome, and how did you overcome them?
5. From a personal perspective, what changes have you experienced so far? Of all these, which ones do you consider to be the most significant for your life?
6. What learnings do you take from these group sessions into your life?
7. What behaviors do you still want to improve?

In the end, the participants self-evaluate the psychotherapeutic process from 0 to 10 (0 being very bad and 10 being very good; Conceição & Bueno, 2020). Considering the participant's responses and the grade they gave to the process, there should be a reflection about

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them, also justifying the holding of this session in an individual context.

SESSION 6 – THERE IS STILL LIFE TO LIVE

Session 6 aims to reflect as a group on the progress made throughout the intervention and prepare participants for the post-intervention plan phase by encouraging the continuity of the strategies developed and skills acquired to deal with future obstacles.

The session begins with the re-application of the WHO-5 scale, which will compare the results obtained in this session with the results obtained in session 0 (Bakhtiyar Aliyev et al., 2024). This comparison will provide quantitative data on participants' wellbeing before and after the intervention, thus assessing its effectiveness.

Next, the logbooks will be collected, and each participant can be invited to read and discuss passages in their logbook with the group. As the diaries are anonymous, this sharing should be optional, and each participant only does so if that is their wish. Suppose there is no sharing of content present in the diary. In that case, participants should talk about their experience, about what it was like to record thoughts, emotions and concerns throughout the intervention, since for many of these male participants, this will likely be the first time they carry out an activity of this kind.

Once this sharing is complete, the psychologist prepares the end of the session and thanks all participants and gives his opinion on how it was to work with the group. Before finalizing, participants will be recommended to develop a support network among themselves, which can be done

online through social networks or group chats, such as WhatsApp (Santos Silva et al., 2024) or suggest that they meet in person to talk about what is troubling them, knowing that these participants now have the social and emotional skills to support themselves and others.

CONCLUSION

Prostate cancer is a problem that affects millions of men every year and ends up being fatal in many cases, especially when it is not diagnosed early. Screening tests are essential for effective treatment of prostate cancer, as well as for ensuring that side effects are minimized. Therefore, the discomfort men feel in relation to screening tests, namely digital rectal examination, is a serious and relevant problem that requires attention from health professionals and the scientific community. Therefore, we suggest that further research be carried out about what causes this discomfort and the most effective methods to alleviate it.

One of the biggest challenges associated with prostate cancer is one of the side effects of its treatment - erectile dysfunction. Erectile dysfunction is strongly correlated with lower levels of self-esteem and other negative psychological impacts, such as depressive symptoms. In this sense, further research into why there is such a strong correlation between these concepts could be helpful for the physical and psychological care of these patients in the future, especially in finding out whether many men associate the value of their masculinity with their sexual vigor and, if so, try to deconstruct this concept.

This intervention plan seeks to raise questions rather than answer them. It focuses on sharing knowledge and information among male participants in the hope that

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they will circulate the information to their social network. Rectal examination, prostate cancer diagnosis, psychological challenges, erectile dysfunction and even the fear of death are topics that these men rarely discuss in their daily lives. Certain stigmas can be demystified, understood, shared and deconstructed by being spoken about openly throughout all sessions. This demystification is essential to this intervention proposal, as it can result in early diagnoses and the search for psychological support and potentially save lives.

In future research topics, more psychological wellbeing instruments can be validated for the Portuguese population, namely for the Portuguese oncology patient population. The WHO-5 instrument is suggested in this intervention plan but has not been validated yet for Portugal.

Additionally, it is also recommended that research be conducted on transgender women and non-binary people diagnosed with prostate cancer, as they are an emerging population that will begin to show a higher incidence of prostate cancer diagnoses shortly. Research in this context is needed to understand what their needs are, what the psychological and social impact of the diagnosis is on trans women and non-binary people, and how future psychological intervention plans focused on trans and non-binary participants can be developed and be more efficient. Prostate cancer can be diagnosed in any human being who has a prostate gland, which is why monitoring should be provided to everyone in a personalized manner.

This psychological intervention plan aims to assist men diagnosed with prostate cancer who require

psychological support and proposes the theoretical model of cognitive-behavioral therapy through psychoeducation on topics such as erectile dysfunction, digital rectal examination, sustainable practices and health—mental, application of relaxation techniques, use of logbooks as homework, and even discussion of poetry. The aim is to reach a population and a problem that is often forgotten when it comes to psychological intervention.

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